(The English Partial translation of Japanese Patent Publication No. 59-109528)

(19) The Japanese Patent Office
(12) Patent Publication
(11) Patent Publication No. 59-109528
(43) Publication date: June 25, 1984
(54) entitled: COATED POLYCARBONATE-BASED RESIN MOLDED ARTCLE
(21) Japanese Patent Application No. 57-221664
(22) Filing date: December 16, 1982
(72) Inventor(s): Fumitaka NAKAYAMA, et al.
(71) Applicant: SUMITOMO CHEMICAL CO., LTD.
NIPPON SHEET GLASS CO., LTD.

(From line 5 from the bottom, right lower column of page 3 to line 3 from the bottom, right lower column of page 4)

The silicon compounds having an epoxy group, for use as Component (A) in the present invention, represented by the general formula (1) include the following silicon compounds. Specific examples of the compound having one glycidoxy group include glycidoxymethyltrimethoxysilane, glycidoxymethyltriethoxysilane, β- glycidoxyethyltrimethoxysilane, β-glycidoxyethyltriethoxysilane, γ-glycidoxypropyltrimethoxysilane, γ-glycidoxypropyltri(methoxyethoxy)silane, γ-glycidoxypropyltriacetoxysilane, δ-glycidoxybutyltrimethoxysilane, δ-glycidoxybutyltriethoxysilane, glycidoxymethyldimethoxysilane, glycidoxymethyl(methyl)dimethoxysilane, glycidoxymethyl(ethyl)dimethoxysilane, glycidoxymethyl(phenyl)dimethoxysilane, glycidoxymethyl(vinyl)dimethoxysilane, glycidoxymethyl(dimethyl)methoxysilane, β-glycidoxyethyl(methyl)dimethoxysilane, β-glycidoxyethyl(ethyl)dimethoxysilane, β-glycidoxyethyl(dimethyl)methoxysilane, γ-glycidoxypropyl(methyl)dimethoxysilane, γ-glycidoxypropyl(ethyl)dimethoxysilane, γ-glycidoxypropyl(dimethyl)methoxysilane, δ-glycidoxybutyl(methyl)dimethoxysilane,

δ-glycidoxybutyl(ethyl)dimethoxysilane and
δ-glycidoxybutyl(dimethyl)methoxysilane. Specific examples of the compound having 2 or 3 glycidoxy groups include
bis(glycidoxymethyl)dimethoxysilane,
bis(glycidoxymethyl)diethoxysilane,
bis(glycidoxyethyl)dimethoxysilane,
bis(glycidoxyethyl)diethoxysilane,
bis(glycidoxypropyl)dimethoxysilane,
bis(glycidoxypropyl)diethoxysilane,
tris(glycidoxymethyl)methoxysilane,
tris(glycidoxymethyl)ethoxysilane,
tris(glycidoxyethyl)methoxysilane,
tris(glycidoxyethyl)ethoxysilane,
tris(glycidoxypropyl)methoxysilane and
tris(glycidoxypropyl)ethoxysilane. Specific examples of the compound having a glycidyl group include
glycidylmethyltrimethoxysilane, glycidylmethyltriethoxysilane,
β- glycidylethyltrimethoxysilane, β- glycidylethyltriethoxysilane,
γ- glycidylpropyltrimethoxysilane,
γ-glycidylpropyltriethoxysilane,
γ-glycidylpropyltri(methoxyethoxy)silane and
γ-glycidylpropyltriacetoxysilane. Specific examples of the compound having an alicyclic epoxy group include
3,4-epoxycyclohexylmethyltrimethoxysilane,
3,4-epoxycyclohexylmethyltriethoxysilane,
3,4-epoxycyclohexylethyltrimethoxysilane,
3,4-epoxycyclohexylpropyltrimethoxysilane and
3,4-epoxycyclohexylbutyltrimethoxysilane.

The organic silicon compounds of the general formula (2) for use as Component (B) in the present invention are as follows. That is, they include trimethylmethoxysilane, dimethyldimethoxysilane, methyltrimethoxysilane, tetraethoxysilane, phenyltrimethoxysilane, phenylmethyldimethoxysilane, vinyltriethoxysilane, vinyltris(β-methoxyethoxy)silane, vinyltriacetoxysilane, γ-methacryloxypropyltrimethoxysilane, γ-aminopropyltriethoxysilane,
N-(β-aminoethyl)-γ-aminopropyltrimethoxysilane,
N-bis(β-hydroxyethyl)-γ-aminopropyltriethoxysilane,

N-(β-aminoethyl)-γ-aminopropyl(methyl)dimethoxysilane, γ-chloropropyltrimethoxysilane, γ-mercaptopropyltrimethoxysilane and 3,3,3-trifluoropropyltrimethoxysilane. These may be used alone or two or more of them may be used in combination.